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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,486	07/10/2001	Min-Seop Jeong	Q63312	5180

7590 04/15/2005
SUGHRUE, MION, ZINN,
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Washington, DC 20037-3213

EXAMINER


HOM, SHICK C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/901,486	Applicant(s)  JEONG ET AL.	
	Examiner Shick C Hom	Art Unit 2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

2. Claims 1-19 are objected to because of the following informalities: In claim 1 lines 9-10, the words "a network node of one private network" seem to refer back to "a node of a private network" recited in claim 1 line 1. If this is true, it is suggested changing "a network node of one private network" to ---the node of the private network---. In claim 6 lines 6-7, the words "a certain network node" and "a certain private network" seem to refer back to "a node" and "a private network" recited in claim 6 line 1. If this is true, it is suggested changing "a certain network node" and "a certain private network" to ---the node of the private network--- and likewise, in claim 6 lines 11-12, changing "the certain network node of the certain private network" to ---the node of the private network---. In claim 12 lines 6-7, claim 16 line 1, the words

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"a private network" seem to refer back to "a private network" recited in claim 12 line 1. If this is true, it is suggested changing "a private network" to ---the private network---. In claim 19 line 22 delete "the external port" and insert ---the external port value---. Claims 2-5, 7-11, 13-18 are objected to because they depend from objected claims 1, 6, 12, respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claims 1-5 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 lines 3-4 which recite the "respective network nodes" lacks clear antecedent basis because no, respective network nodes have been previously recited in the claim and therefore the limitation is not clearly understood. In claim 19 line 17 which recite "network nodes" is not clear as to whether it is reciting said network nodes of claim 19 line 5 or some other network nodes. Claims 2-5 are rejected under 35 U.S.C. 112, second paragraph because they depend from rejected claim 1.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6, 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Wootton et al. (6,128,298).

Regarding claims 1, 6:

Wootton et al. disclose the system for accessing a node of a private network, comprising: an assigning portion for assigning external port values to respective network nodes based on information collected from the network nodes of the private network, and storing the assigned external port values; an exchanging portion for exchanging the external port values of the respective network nodes of private networks (see col. 1 lines 26-46 which recite maintaining the source information taken from the received data packet from the private network,

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replacing the source port with the node port value; and col. 9 lines 52-56 which recite storing the maintained source information as a lookup table whereby the node port value index into the table clearly anticipate the steps of assigning port values to network nodes based on information collected, storing the port values; and exchanging external port values); and an address converting portion for converting the external port values into corresponding private IP addresses and internal port values when a network node of one private network accesses another network node of another private network by using the external port values of another network node of another private network (see col. 5 lines 36-55 which recite the translation table including the private IP address being used to map address and ports from the private network to the public network and vice versa clearly anticipate the step of converting the external port values into corresponding private IP addresses).

Regarding claims 2, 8:

Wootton et al. disclose wherein each of the network nodes is assigned at least one external port value (see abstract and col. 1 lines 26-46 which recite the private network nodes including address and port information).

Regarding claims 3-5, 9-11:

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Wootton et al. disclose wherein the external port value has an http communication protocol; an FTP communication protocol; or a TELNET communication protocol (see col. 7 lines 39-45 which recite the use of DNS, Web browsers, FTP, and Telnet protocols).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35

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U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wootton et al. (6,128,298) in view of Maddalozzo, Jr. et al. (5,878,218).

Regarding claims 12-18:

For claim 12, Wootton et al. disclose the method for accessing a node of a private network, comprising the steps of:

- i) assigning external port values to network nodes based on an information collected from the network nodes and storing the information in a mapping table (see col. 1 lines 26-46 which recite maintaining the source information taken from the received data packet from the private network, replacing the source port with the node port value; and col. 9 lines 52-56 which recite storing the maintained source information as a lookup table whereby the node port value index into the table clearly anticipate the steps of assigning port values to network nodes based on information collected, storing the port values; and exchanging external port values).

Regarding claim 13:

Wootton et al. disclose wherein the node information of step iii) comprises an external port value (see col. 1 lines 26-

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46 which recite replacing the source port with the node port value).

Regarding claim 16-18:

Wootton et al. disclose wherein a private network provided with at least one global IP address performs step i); wherein a certain network node of a certain external private network performs step iii); and wherein the certain network node of the certain external private network performs step iv) (see col. 4 lines 56-67 which recite the private network coupled to the internet being part of the global data network and nodes within the private network have unique IP address only clearly anticipate the private network having at least one global IP address; certain external private network and node performing steps iii) and iv)).

Wootton et al. disclose all the subject matter of the claimed invention with the exception of ii) generating a web page displaying node information of a private network, and linking the web page to a global IP address; iii) accessing the web page and the node information of the private network; and iv) accessing one of the network nodes of the private network based on the node information obtained in step iii) as in claim 12; wherein the web page of step ii) displays a screen containing icons for respective nodes of the private network as

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in claim 14; and wherein each node is accessed by selecting and clicking the icon representing the node as in claim 15.

Maddalozzo, Jr. et al. from the same or similar fields of endeavor teach that it is known to provide the step of ii) generating a web page displaying node information of a private network, and linking the web page to a global IP address; iii) accessing the web page and the node information of the private network; and iv) accessing one of the network nodes of the private network based on the node information obtained in step iii) (see abstract which recite accessing the data file of a private network from a source external to the private network, and col. 4 lines 15-34 which recite the use of the web page including the displayed link which corresponds to the data file on the private network); wherein the web page of step ii) displays a screen containing icons for respective nodes of the private network; and wherein each node is accessed by selecting and clicking the icon representing the node (see col. 3 lines 10-35 which recite the user navigating by using a mouse and pointing and clicking on the visual objects on the screen clearly anticipate the icons on the screen and access by selecting and clicking). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the step of ii) generating a web

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page displaying node information of a private network, and linking the web page to a global IP address; iii) accessing the web page and the node information of the private network; and iv) accessing one of the network nodes of the private network based on the node information obtained in step iii); wherein the web page of step ii) displays a screen containing icons for respective nodes of the private network; and wherein each node is accessed by selecting and clicking the icon representing the node as taught by Maddalozzo, Jr. et al. in the communications method of Wootton et al. The step of provide the step of ii) generating a web page displaying node information of a private network, and linking the web page to a global IP address; iii) accessing the web page and the node information of the private network; and iv) accessing one of the network nodes of the private network based on the node information obtained in step iii); and wherein the web page of step ii) displays a screen containing icons for respective nodes of the private network; and wherein each node is accessed by selecting and clicking the icon representing the node can be implemented by providing the display including the web page and software for linking and accessing via the icons on the web page to the global IP address of Maddalozzo, Jr. et al. into the method of Wootton et al. The motivation for providing the display including the web page and

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software for linking the web page to the global IP address and icons as taught by Maddalozzo, et. al. in the communication method of Wootton et al. being that it provides more efficiency for the system since the user can easily link to the node of the private network via the displayed web page and icons.

Allowable Subject Matter

9. Claim 7 would be allowable if rewritten to overcome the objection(s) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. Claim 19 would be allowable if rewritten or amended to overcome the objection(s) and rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Alkhatib discloses domain name routing.

Ylonen discloses a method for packet authentication in the presence of network address translations and protocol conversions.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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